

HIV Helper T-cell Epitopes

Table 12: Nef

Location	WEAU	Sequence	Immunogen	Species(HLA)	References
Nef(1-20 LAI)	Nef(1-20)	MGGKWSKSSVVGWPTV-	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
RERM					
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein			
		• Proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(16-35 LAI)	Nef(16-35)	VREMRMRAEPAADGVG- AASR	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(31-50 LAI)	Nef(31-50)	GAASRDLEKHZGATSS- NTAA	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(45-69 BRU)	Nef(45-67)	SSNTAAATNAACAWLEA- QEEEEVGFP	rec Nef	rat and chimpanzee(unk)	[Estaqueier (1992)]
		• Antigenic domain: ATNAACAWL; priming with peptide enhanced subsequent Ab response to Nef protein immunization			
Nef(46-65 LAI)	Nef(46-65)	SNTAAATNAACAWLEAQ- EEE	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			

Location	WEAU	Sequence	Immunogen	Species(HLA)	References
Nef(61-80 LAI)	Nef(59-78) RPMT	QEEEEEVGFPVTPQVPL-	Nef, Rev and Tat DNA immunization	murine(H-2 ^b)	[Hinkula (1997)]
	• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein				
	• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev				
Nef(76-95 LAI)	Nef(74-93) KEKG	LRPMTTYKAADVLSHFL-	Nef, Rev and Tat DNA immunization	murine(H-2 ^b)	[Hinkula (1997)]
	• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein				
	• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev				
Nef(98-112 BRU)	Nef(96-110) Peptide alone could stimulate monkey T-cells in the absence of carrier protein; required carrier protein in rat	EGLIHSQRQQDILL	rec Nef	chimpanzee(unk)	[Estaqueier (1992)]
	• Peptide alone could stimulate monkey T-cells in the absence of carrier protein; required carrier protein in rat				
Nef(91-110 LAI)	Nef(89-108) QDIL	LKEKGGILEGLIHSQRR-	Nef, Rev and Tat DNA immunization	murine(H-2 ^b)	[Hinkula (1997)]
	• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein				
	• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev				
Nef(106-125 LAI)	Nef(104-123) PDWQ	RQDILDLDWIYHTQGYF-	Nef, Rev and Tat DNA immunization	murine(H-2 ^b)	[Hinkula (1997)]
	• Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein				
	• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev				

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Nef(121-140 LAI)	Nef(119-138)	FPDWQNYTPGPGVRYP-LTFG	Nef, Rev and Tat DNA immunization	murine(H-2 ^b)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(136-155 LAI)	Nef(134-153)	PLTTFGWCYKLVPVEPD-KVEE	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(151-170 LAI)	Nef(149-168)	DKVVEANKGENTSLIH-FVSL	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(166-185 LAI)	Nef(164-183)	HPVSLHGMDDPEREVLEWRF	Nef, Rev and Tat DNA immunization	murine(H-2 ^{b,d})	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			
Nef(181-205 LAI)	Nef(179-203)	LEWRFDSSRLAFHHVAR-ELHPEFYFKN	Nef, Rev and Tat DNA immunization	murine(H-2 ^d)	[Hinkula (1997)]
		• Stronger, broader responses were observed in animals vaccinated with DNA epidermally			
		• Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev			